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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,910	01/03/2002	Michio Ihara	Q67977	2298

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SUGHRUE, MION, ZINN, MACPEAK & SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

EXAMINER

OMGBA, ESSAMA

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 02/10/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/033,910

Applicant(s)

IIHARA ET AL.

Examiner

Essama Omgba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The process steps need to be positively recited in the claim(i.e. Forming a reduced diameter ... by an upsetting operation...).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted Prior Art (AAPA).

Applicant, at pages 1 and 2 of the specification to be known as AAPA, discloses a method of manufacturing an outer race used in a constant velocity universal joint of a tripod type, the method comprising forming an intermediate portion which eventually forms the outer race to form a cup portion including chamfered portions plastically formed by the use of a punch and subsequently forming the outer race to final design

dimension and shape by a drawing process in which the chamfered portions are also finished. Applicant should note that the structure of the outer race is conventional.

Applicant should note that phrase "an intermediate member which eventually forms the outer race" in AAPA is equivalent to Applicant's claimed upsetting step in that final design dimension and shape are not yet provided.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000061576 (JP'576) in view of AAPA.

With regards to claims 2 and 7, JP'576 discloses a method of manufacturing an outer race used in a constant velocity universal joint of a tripod type, the constant velocity joint comprising a cup body 1 and a shaft 2 extending axially outwardly from a bottom of the cup body in a direction opposite to an open end thereof, the cup body having an inner peripheral surface formed with three axially extending track grooves 11a, the cup body further including a radially outwardly protruding wall portion 11b aligned with each of the track grooves, and a radially inwardly depressed wall portion 12 aligned with a reduced diameter portion of the peripheral wall of the cup body between neighboring track grooves, the protruding and depressed wall portions being so defined as to alternate

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with each other in a direction substantially circumferentially of the cup body, each of the reduced diameter portions of the peripheral wall of the cup body adjacent the open end of the latter having a chamfered portion 13 defined at a peripheral lip region of the open end of the cup body, see figures 1, 2 and 4, the method comprising an upsetting step for making a generally elongated intermediate member having a small diameter portion and a large diameter portion with an axially inwardly depressed recess defined in an end face of the large diameter portion remote from the small diameter portion, the recess having a tapered peripheral wall face T which eventually defines a general shape of chamfered portions, see figure 3(d). Although the abstract does not disclose a cup forming step by means of a combined pushing method including a forward pushing and a rearward container pushing and a drawing step for shaping the cup body to a final design dimension and shape by means of a drawing technique, however Applicant at pages 1 and 2 of the specification to be known as AAPA, discloses those steps as being part of JP'576 manufacturing process. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have shaped the cup body as taught by JP'576 in order to manufacture the outer race more economically.

For claims 3-5, see figures 3(a) to 3(d) with the die of figures 3(a) to 3(c) and the punch P of figure 3(d).

For claim 6, see figures 3(a) and 3 (b).

***Response to Arguments***

7. Applicant's arguments filed on November 17, 2003 have been fully considered but they are not persuasive.

In response to Applicant's argument that AAPA fails to teach or disclose "... an upsetting operation in which ... respective shapes which eventually define the chamfered portions are formed by an upsetting technique; and a drawing operation to shape the large diameter portion to a final design dimension and shape by a drawing technique, said upsetting operation being carried out prior to the drawing operation.", the examiner respectfully disagrees. AAPA does indeed reach an upsetting operation prior to drawing on page 2, lines 8-10, furthermore as recited on the same page a punch is used to form an **intermediate** shape of the race and chamfered portions which is equivalent to recess which will eventually be chamfered portions as recited by Applicant. Note that the chamfered portions of AAPA are finished in the drawing operation that is carried out after the punching (upsetting) operation. The examiner cannot see any differences between the steps of AAPA and the claimed steps. Applicant at page 4 of the specification admits that "general shapes of the eventually formed chamfered portions are defined during the upsetting step" and that "the mold used during the upsetting step requires the shaping surfaces to be provided in the upsetting mold for forming the chamfered portions", this is clearly what is taught by AAPA. It appears that Applicant's novelty is the particular mold used in manufacturing the outer race.

In view of the above remarks, the examiner maintains that claim 1 is anticipated by AAPA and claims 2-7 are made obvious as outlined above in the rejections.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (703) 305-2915. The examiner can normally be reached on M-F (10-7:30) First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

eo  
February 8, 2004

A large, stylized handwritten signature in black ink, likely belonging to a patent examiner or official, positioned to the right of the date.